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| APPLICATION NO.             | FILING DATE            | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------|------------------------|----------------------|---------------------|------------------|
| 10/564,926                  | 01/17/2006             | Robert J. Bend       | EQUIP0538WOUS       | 2330             |
| Cynthia S Mur               | 7590 02/06/2007<br>phy | EXAMINER TRAN, LEN   |                     |                  |
|                             | oisselle & Sklar       |                      |                     |                  |
| 19th Floor<br>1621 Euclid A | venue                  | ART UNIT             | PAPER NUMBER        |                  |
| Cleveland, OH               |                        | 1725                 |                     |                  |
|                             |                        |                      |                     |                  |
| SHORTENED STATUTOR          | RY PERIOD OF RESPONSE  | MAIL DATE            | DELIVERY MODE       |                  |
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

|          |  | Application  | on No.   | Applicant(s)  |         |
|----------|--|--|--|---|---------|
|          |  | 10/564,92  | 26   | BEND, ROBERT J.   | 6       |
|          | Office Action Summary  | Examiner   |  | Art Unit  |         |
|          |  | Len Tran   |  | 1725  |         |
| Pe       | The MAILING DATE of this communication apperiod for Reply  | ears on the  | e cover sheet with the   | e correspondence address  | 5       |
|          | A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF TH<br>36(a). In no eve<br>vill apply and wi<br>cause the appl | HIS COMMUNICATION  The state of | ON. Itimely filed om the mailing date of this commun NED (35 U.S.C. § 133). |         |
| St       | atus   |  |  |   |         |
|          | 1)⊠ Responsive to communication(s) filed on <u>17 Ja</u>   | anuary 200   | <b>6</b> .   |   | ·       |
|          | 2a) ☐ This action is <b>FINAL</b> . 2b) ☒ This   | · ·  |  |   |         |
|          | 3) Since this application is in condition for allowar  | prosecution as to the mer  | rits is  |   |         |
|          | closed in accordance with the practice under E   | -  |  | ·   | •       |
| Di       | sposition of Claims  |  | * .  |   |         |
|          | 4) Claim(s) 12-32 is/are pending in the application  | ٦.   |  |   |         |
|          | 4a) Of the above claim(s) is/are withdraw  | vn from co   | nsideration.   |   |         |
|          | 5) Claim(s) is/are allowed.  |  |  | •   |         |
|          | 6) Claim(s) <u>12-19,21-29,31 and 32</u> is/are rejected   | l <b>.</b>   |  | ,   |         |
|          | 7)⊠ Claim(s) <u>20 and 30</u> is/are objected to.  |  |  | ·.  |         |
|          | 8) Claim(s) are subject to restriction and/or  | r election re  | equirement.  |   |         |
| Αį       | oplication Papers  |  |  |   |         |
|          | 9) The specification is objected to by the Examine   | г.   |  |   |         |
|          | 10) The drawing(s) filed on is/are: a) acce  | epted or b)  | objected to by th  | e Examiner.   |         |
|          | Applicant may not request that any objection to the  | drawing(s) b   | e held in abeyance. S  | See 37 CFR 1.85(a).   |         |
|          | Replacement drawing sheet(s) including the correct   | ion is requir  | ed if the drawing(s) is  | objected to. See 37 CFR 1.  | 121(d). |
|          | 11) The oath or declaration is objected to by the Ex   | aminer. No   | ote the attached Offi  | ce Action or form PTO-15  | 52.     |
| Pı       | riority under 35 U.S.C. § 119  |  | •  |   |         |
|          | 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:   | priority un  | der 35 U.S.C. § 119  | (a)-(d) or (f).   |         |
|          | 1. ☐ Certified copies of the priority documents  | s have bee   | n received.  |   |         |
|          | 2. Certified copies of the priority documents  |  |  | ation No  |         |
|          | 3. Copies of the certified copies of the prior   |  |  |   | je      |
|          | application from the International Bureau  | ı (PCT Rul   | e 17.2(a)).  | •   |         |
|          | * See the attached detailed Office action for a list   | of the certi   | fied copies not rece   | ived.   |         |
|          |  |  |  |   |         |
|          |  |  |  |   |         |
| Atı      | tachment(s)  |  |  |   |         |
| 1)       | Notice of References Cited (PTO-892)   |  | 4) Interview Summa   |   |         |
| 2)<br>31 | Notice of Draftsperson's Patent Drawing Review (PTO-948)  ☑ Information Disclosure Statement(s) (PTO/SB/08)  | •  | Paper No(s)/Mail 5) Notice of Informa  |   |         |
| رر       | Paper No(s)/Mail Date  |  | 6) Other:  | • •   |         |
|          |  |  |  |   |         |

## DETAILED ACTION

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## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 12-19, 21-29, 31, 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaminski et al (US 6,615,901).

As to claims 12, 13, 23, and 24, Kaminski et al disclose an engine block mold comprising a barrel slab core and cylinder liner (15), wherein the barrel portion has outer diameter taper along at least a portion of its length and the liner has a substantially matching internal diameter taper along at least a portion of its length (figure 3a).

As to claims 14 and 25, the barrel core and is integral with crankcase core (figure 3).

As to claims 15 and 26, Kaminski et al disclose assembling of a cylinder liner (15) to the slab barrel core (figure 3a).

As to claims 16, 17, and 27, the insertion step is done by a robot (col. 6, line 33).

As to claims 18, 19, 28, and 29, the liner is prepared by cleaning and heating.

As to claims 21 and 31, molten metal is poured into the mold with the barrel core and cylinder liner inside mold.

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As to claims 22 and 32, the liner is machined (col. 6, line 45).

## Allowable Subject Matter

3. Claims 20 and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior arts of record fail to teach cleaning the liner by fluidized bed.

## Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Len Tran whose telephone number is (571) 272-1184. The examiner can normally be reached on M-F, 8:30 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Len Tran
Primary Examiner
Art Unit 1725

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February 3, 2007